

The use of a patellar strap in athletes with a jumper's knee: A pilot study on the effect on symptoms, proprioception and tendon structure

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A patellar strap reduces pain, has a positive effect on knee joint proprioception and tendon structure.

Ethische beoordeling	Positief advies
Status	Werving nog niet gestart
Type aandoening	-
Onderzoekstype	Interventie onderzoek

Samenvatting

ID

NL-OMON28088

Bron

Nationaal Trial Register

Verkorte titel

TOPPRO 2

Aandoening

Jumper's knee; patellar tendinopathy

Ondersteuning

Primaire sponsor: University Medical Center Groningen

Overige ondersteuning: Bauerfeind

Onderzoeksproduct en/of interventie

Uitkomstmaten

Primaire uitkomstmaten

The difference in Visual Analogue Scale (VAS) for pain after ten single leg decline squats between the patellar strap and control condition will be used as the main study outcome in this study.

Toelichting onderzoek

Achtergrond van het onderzoek

Patellar tendinopathy (PT) is a common painful overuse injury which often interferes with the sports career of jumping athletes. Orthoses like a patellar strap are commonly used to reduce pain and to remain active in sports. A recent study (de Vries et al, in preparation) showed that pain can decrease with the use of a patellar strap, but it is unknown if this positive effect can be found with another type of strap and what the effect on proprioception and tendon structure is. Furthermore, the relationship between the effectiveness of the use of a patellar strap and tendon structure is unclear.

Doel van het onderzoek

A patellar strap reduces pain, has a positive effect on knee joint proprioception and tendon structure.

Onderzoeksopzet

1. Baseline (after one control week, with athletic performance without orthosis)
2. After one week of athletic performance with the Genupoint patellar strap

Onderzoeksproduct en/of interventie

Subjects visit the center for sports medicine two times.

During the first visit the patellar tendons of the participants are scanned using UTC and all subjects perform three functional tests (10 single leg decline squats, maximal vertical jump test and a triple hop test) and a proprioception test in two different conditions. The two conditions are: with patellar strap and a control condition. The order of the conditions is balanced between subjects. Directly after each test, the participant scores on a VAS pain scale the experienced pain during the test. Furthermore, the maximal vertical jump height and the distance covered in the triple hop test are documented.

After this visit, subjects wear the Genupoint patellar strap during sports for one week.

During the second visit (after one week of athletic performance with strap) the patellar tendons are again scanned using UTC. In addition participants fill out a questionnaire about the wearing comfort of the strap.

Contactpersonen

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Deelname eisen

Belangrijkste voorwaarden om deel te mogen nemen (Inclusiecriteria)

- Age 18-50 years
- Current symptoms of knee pain in the patellar tendon or its patellar or tibial insertion in connection with training and competition in one or both knees
- Duration of symptoms for over three months (to exclude acute inflammatory tendon problems and de novo partial ruptures).
- Palpation tenderness at the corresponding painful area.

- VISA-P score < 80.
- Participating athlete
- No use of a patellar strap during sports in the week prior to the study.

Belangrijkste redenen om niet deel te kunnen nemen (Exclusiecriteria)

- Signs or symptoms of other (co-)existing knee pathologies
- Use of drugs with a putative effect on patellar tendinopathy in the last year on daily basis or painkillers
- Neurologic disorders which might influence pain and proprioception
- Knee surgery or injection therapy with corticosteroids in the last preceding three months

Onderzoeksopzet

Opzet

Type:	Interventie onderzoek
Onderzoeksmodel:	Cross-over
Toewijzing:	Gerandomiseerd
Blinding:	Open / niet geblindeerd
Controle:	Actieve controle groep

Deelname

Nederland	
Status:	Werving nog niet gestart
(Verwachte) startdatum:	01-02-2015
Aantal proefpersonen:	25
Type:	Verwachte startdatum

Ethische beoordeling

Positief advies

Datum: 01-12-2014

Soort: Eerste indiening

Registraties

Opgevolgd door onderstaande (mogelijk meer actuele) registratie

ID: 42105

Bron: ToetsingOnline

Titel:

Andere (mogelijk minder actuele) registraties in dit register

Geen registraties gevonden.

In overige registers

Register	ID
NTR-new	NL4737
NTR-old	NTR4991
CCMO	NL51658.042.14
OMON	NL-OMON42105

Resultaten